

## **ATTACHMENTS**





**OFFICE OF THE  
ATTORNEY GENERAL**

6 State House Station  
Augusta, Maine 04333-0006

phone: 626-8545  
fax: 626-8812  
email: [jerry.reid@maine.gov](mailto:jerry.reid@maine.gov)

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***Memorandum***

**To:** Joint Standing Committee on Natural Resources  
**From:** Jerry Reid, AAG, Chief, Natural Resources Division  
**Date:** May 13, 2010  
**Subject:** Commerce Clause Limitations on State Regulation of Solid Waste; Legal Restrictions on Unlined Landfills

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**I. Commerce Clause**

You have requested advice from this Office concerning the limitations that the Commerce Clause of the U.S. Constitution places on the ability of states to regulate the flow of solid waste. In this memorandum, I have attempted to summarize the essentials of this issue in a manner that is concise and accurate, but not unnecessarily technical. As you will see, some of the tests courts use to evaluate potential Commerce Clause violations are subjective, leaving room for interpretation and argument. In fact, the Supreme Court cases in this area often sharply divide the Court. This means that it can be difficult to predict with confidence how various legislative proposals might fare under judicial review. However, the caselaw does provide certain guideposts that are helpful to bear in mind during the drafting and consideration of this type of legislation, and this memorandum attempts to identify and explain them.

**A. The Commerce Clause Prevents States from Banning the Importation of Solid Waste.**

The clearest and most important effect of the Commerce Clause on the regulation of solid waste is to prevent states from banning its importation. This principle was established in the

landmark Supreme Court case of *Philadelphia v. New Jersey*, 437 U.S. 617 (1978). In determining whether legislation constitutes an impermissible ban, courts evaluate whether the law discriminates against interstate commerce. In this context “discrimination” means giving in-state economic interests preferential treatment as against their out-of-state counterparts. *Oregon Waste Sys. v. Department of Env'tl. Quality*, 511 U.S. 93, 99 (1994). If the court concludes a law’s discriminatory treatment is motivated by simple economic protectionism, it will almost certainly be found unconstitutional. *Id.* A law discriminating on its face against out-of-state interests will be upheld against a Commerce Clause challenge only upon a showing that it is the only means to advance a legitimate local purpose. *See Maine v. Taylor*, 477 U.S. 131, 138 (1986) (upholding a state ban on the importation of baitfish to prevent the spread of communicable fish-borne disease).

**B. States Have Discretion to Control the Flow of Solid Waste When They Are Acting as “Market Participants” Rather Than Regulators.**

Courts have recognized an important exception to the general rule preventing states from banning out-of-state waste from their landfills. When states act as “market participants” rather than regulators, states may restrict the type of waste they accept without running afoul of the Commerce Clause. *United Haulers Assn. v. Oneida-Herkimer Solid Waste Management Authority*, 550 U.S. 330, 344 (2007). A state acts as a “market participant” when, for example, it owns the landfill in question, as the State of Maine owns the Juniper Ridge Landfill. Under these circumstances, the State may limit the waste it accepts for disposal at the facility based on type, volume, place of origin or other characteristic in the same way that any private, commercial operator of a landfill is entitled to make such business decisions. State actions that are protected by the “market participant” doctrine include purchasing, selling, hiring or subsidizing of services. *Reeves, Inc. v. Stake*, 447 U.S. 429, 437 (1990).

The premise upon which courts have recognized this exception is that when a state is acting as the owner of a public landfill, its decisions are presumed to be motivated by legitimate public health, safety and welfare interests. By contrast, when a State exercises its regulatory authority in a manner that benefits local businesses and burdens out-of-state competitors, courts often find the law to be economic protectionism that violates the Commerce Clause. *United Haulers*, 550 U.S. at 342.

Most lower courts have also held that when a state, by law, directs the proprietary activities of a municipality, the state is acting as a market participant rather than a regulator. *National Solid Waste Mgmt. Ass'n. v. Williams*, 146 F.3d 595, 597 (8<sup>th</sup> Cir. 1998); *Smith Setzer & Sons v. South Carolina Procurement Review Panel*, 20 F.3d 1311, 1319-20 (4<sup>th</sup> Cir. 1994); *Big Country Foods Inc. v. Board of Educ.*, 952 F.2d 1173, 1179 (9<sup>th</sup> Cir. 1992); *Trojan Tech. Inc., v. Pennsylvania*, 916 F.2d 903, 911 (3<sup>rd</sup> Cir. 1990).<sup>1</sup> The basic premise for this conclusion is that local governments are simply political subdivisions of the state, and therefore the state may direct their purchasing decisions in the same way it may do so for any of its agencies. While the Supreme Court has yet to address the issue, the weight of legal authority indicates that state legislatures may control municipal decisions governing the purchasing, selling, hiring or subsidizing of solid waste services just as they may control those decisions at the state level.

### **C. Conclusion**

Court decisions reviewing solid waste legislation under the Commerce Clause can be fact-specific, and often turn on the application of legal standards that are subject to differing interpretations. For instance, judges on the same court will often disagree on the extent to which a law burdens out-of-state interests, or whether a law should be considered an exercise of

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<sup>1</sup> The Seventh Circuit reached a contrary conclusion in *W.C.M. Window, Inc. v. Bernardi*, 730 F.2d 486, 494 (7<sup>th</sup> Cir. 1984).

regulatory or proprietary authority. Given this subjectivity, we recommend that the Committee work closely with both its legislative analyst and the Attorney General's Office when considering this type of legislation in order to achieve its policy objectives while minimizing constitutional risks.

## **II. State and Federal Regulations that Effectively Prohibit Unlined Municipal Landfills**


You have also asked for citations to state and federal regulations that have the effect of prohibiting unlined municipal landfills. At the federal level, the Environmental Protection Agency has promulgated regulations requiring composite liners in municipal landfills pursuant to the Resource Conservation and Recovery Act ("RCRA"). 40 CFR 258.40. The Maine DEP has also adopted such requirements in its Chapter 401, *Landfill Siting, Design and Operation*. 06-096 CMR ch. 401(2)(D)(1). These regulations appear to be the most pertinent to your interest.

Historical Perspective on Solid Waste Management in Maine

Timeline of Significant Events

May 13, 2010

Paula M. Clark, Director  
Division of Solid Waste Management  
Maine Department of Environmental Protection



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**1965 - 1970**

- Federal Solid Waste Act passed
- Maine Dept. of Health and Welfare made responsible for solid waste matters
- Field survey conducted to determine existing conditions
- Report prepared (based on survey): "Solid Waste Management/Plan"; submitted to USEPA

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**1970**

- Maine Air and Water Improvement Commission established; became the Environmental Improvement Commission

**1972**

- Department of Environmental Protection replaced Environmental Improvement Commission (responsible for solid waste)

**1973**

106<sup>th</sup> Maine Legislature passed the "Maine Solid Waste Management Act" (authority to BEP to adopt, amend, enforce solid waste regulations)

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## 1976

- First Maine Solid Waste Management Regulations adopted by BEP
- DEP Commissioner appointed a "State Solid Waste Advisory Committee" to develop recommendations for a state solid waste strategy

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## 1977

- Advisory Committee issued "Solid Waste: New Directions for Maine"; 4 principal areas addressed: recycling, energy recovery, land disposal and joint efforts (i.e. regionalization/economies of scale)
- 454 open dumps identified in Maine

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## 1979

- State Solid Waste Management Plan adopted by BEP;
  - Major objectives addressed:
    - Resource conservation
    - Resource recovery
    - Land disposal
    - Waste storage, collection and transfer
    - Pre-disposal processing

Primary focus on basic public health and environmental issues

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### 1981

- PL 1981 Chapter 528 (An Act to authorize a General Fund Bond Issue in the Amount of \$1,500,000 to Assist Municipalities with Resource Recovery of Solid Waste)

Evaluation and implementation of municipal solid waste recovery systems

### 1983

- Maine Solid Waste Management Regulations revised

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### 1985

- Maine Resource Recovery Association Established
  - Model plans for transfer stations
  - Recycling programs and markets
- 301 open dumps/landfills appear on DEP's "Solid Waste Disposal Facility Enforcement Priority List"

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### 1986

- Growing concern about proposed new landfills in southern Maine and the importation of waste
- Legislative consideration of a moratorium on waste importation and disposal; alternatively undertook Legislative study (P & SL 1985 Chapter 137)

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## 1987

- Joint Standing Committee on Energy and Natural Resources issued: "Study of Solid Waste Management and Disposal Policy in Maine".

Addressed 3 major questions:

- Basic objectives of Maine's solid waste management disposal system?
- Current division of responsibility for solid waste management and disposal appropriate to meet objectives?
- Are financial and technical resources sufficient?

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## 1987 (con't)

- PL 1987 Chapter 517 (An Act to Ensure Safe Management, Recycling and Disposal of Solid Waste and to Reorganize the Solid Waste Law)

Resulted from the study; included provisions addressing:

- "special waste"
- Solid waste transportation
- Technical assistance to municipalities (\$200K for regional tire, white goods and demo debris projects)
- Municipal landfill closure program (financial and technical assistance)

Recycling and source reduction:

- program in State Development Office
- state recycling plan
- recycling advisory council

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## 1987 (con't)

- Solid waste facility siting
  - environmental considerations
  - public benefit determination requirement (intent that siting and development be driven by Maine needs)
  - recycling standard
  - public participation in facility siting
  - municipal ordinances
  - civil/criminal record review
  - commercial landfill licensing moratorium

Solid waste disposal capacity needs analysis

Maine Energy (MERC) waste-to-energy facility in Biddeford began operating

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### 1988

- PL 1987 Chapter 126 authorized \$5M bond issue for municipal landfill closure program
- Penobscot Energy Recovery Company (Orrington) and Regional Waste Systems (Portland) waste-to-energy facilities began operating

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### 1989

- PL 1989 Chapter 585 (An Act to Promote Reduction, Recycling and Integrated Management of Solid Waste and Sound Environmental Regulation):
  - Maine Waste Management Agency (MWMA)
  - Statutory solid waste management hierarchy
  - Waste Management Advisory Council
  - State Solid Waste and Recycling Plan
  - Disposal capacity analysis
  - Recycling goal, assistance and incentives
  - Facility siting board
  - State owned disposal facilities
  - Maine Solid Waste Management Fund established
  - Ban on new commercial disposal facilities

- Comprehensive revisions to Maine Solid Waste Management Regulations

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### 1992

- Legislature extended deadline for cessation of use of unlicensed landfills; 260 landfills receive notice
- Mid-Maine Waste Action Corp. waste-to-energy facility in Auburn began operating

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### 1995

- MWMA abolished; statutory responsibilities transferred to SPO (many) and DEP (a few), or were eliminated
- Carpenter Ridge landfill offered to State by Lincoln Pulp and Paper; license issued to SPO

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### 1998

- Updated Waste Management and Re3cycling Plan (6/15/98) submitted to SPO
- Pine Tree Landfill (Hampden) licensed by DEP for expansion to accommodate 3.3 million cy of solid waste

### 2001

- First SPO grants to towns for universal waste storage
- Crossroads Landfill (Norridgewock) licensed by DEP for expansion to accommodate 4 million cy of solid waste

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### 2002

- "An Analysis of Competition in Collection and Disposal of Solid Waste in Maine", presented to Joint Standing Committee on Natural Resources by the University of Maine and the Maine Attorney General's Office
- Ban on disposal of mercury-added products effective (7/15-02)

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### 2003-2004

- PL 2003 Chapter 150 – banned disposal of household cathode ray tubes in disposal facilities after 1/1/06; called for development of a shared responsibility plan for collection and recycling
- Resolves 2003 Chapter 93 authorized State purchase of the West Old Town Landfill from Fort James Operating Company
  - State (SPO) issued RFP for operation
  - Casella Waste Systems selected
  - State and Casella enter into "Operating Services Agreement (2/5/04)
- Amended license for the West Old Town Landfill issued by DEP to SPO (4/9/04)

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### 2005

- City of Lewiston proposed 30 year contract with Casella Waste Systems for operation of its landfill; Attorney General's Office determines proposal to be inconsistent with the statutory ban on new commercial landfills (10/12/05)

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### 2006

- Growing concern regarding the importation, disposal and management of construction and demolition debris
- PL 2005 Chapter 617 (An Act to Ensure Proper Disposal of Debris and Protection of the Environment)
  - Limit on amount of CDD wood derived fuel burned
  - Required report on use of CDD wood for fuel and CDD processing
- Sale of Fort James mill in Old Town to Red Shield; transfer of relevant contractual provisions in 2004 Operating Services Agreement from Fort James to Red Shield
- Agreement among Pine Tree Landfill in Hampden, DEP and the Town of Hampden to cease waste acceptance by 12/31/09

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## 2007

- "Report of the Blue Ribbon Commission on Solid Waste Management" submitted to the Joint Standing Committee on Natural Resources (March 2007)

Comprehensive review of solid waste management in Maine with priority consideration given to:

- Importation and exportation of municipal solid waste and CDD
- Solid waste management for the State
- Solid waste management hierarchy
- Host community benefits

- "Report on the Substitution of Wood from Construction and Demolition Debris for Conventional Fuels in Biomass Boilers" (DEP, April 2007)

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## 2007 (con't)

- PL 2007 Chapter 406 (An Act to Provide for the Protection of Communities that Host a Solid Waste Disposal Facility)

- Defined "host community"
- Established dispute resolution process

- PL 2007 Chapter 343 (An Act to Promote Recycling of Cellular Telephones)

- Disposal ban (effective 1/1/08)
- Retailer responsibility to accept discarded phones

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## 2007 (con't)

- PL 2007 Chapter 414 (An Act to Implement Recommendations of the Blue Ribbon Commission on Solid Waste Management)

- Defined "waste generated within the State"
- Specified that facilities owned by the State may not be licensed to accept waste not generated within the State

- PL 2007 Chapter 338 (An Act to Continue to Ensure the Long-Term Capacity of Municipal Landfills)

- Revise definition of "commercial solid waste disposal facility"
- Required public benefit determination for acceptance by publicly owned solid waste landfills of waste generated out of state

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## 2008

- LD 810 (An Act to Improve Solid Waste Management)
  - Required solid waste processing facilities that generate residue requiring disposal to "recycle all waste accepted to the maximum extent practicable, but in no case at a rate less than 50%"
  - Modified content and submission schedule of the Solid Waste Generation and Disposal Capacity Report by SPO
  - Required a report on solid waste odor management by DEP
  - Required DEP and SPO to report on "a system by which solid waste management activities are performed by those agencies"
- PL 2007 Chapter 170 (Resolve, To Require Rulemaking Concerning Landfill Gas and Odor Management)

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## 2009

- Updated Maine Solid Waste Management and Recycling Plan submitted by SPO
- Old Town Fuel and Fiber acquires Red Shield facility in Old Town
- PL 2009 Chapter 412 (An Act to Improve Landfill Capacity); required report from SPO concerning
  - Issues related to the operation and management of the state-owned Juniper Ridge Landfill
  - Whether the restriction on the expansion of an existing commercial disposal facility (38 MRSA §1310-X) should be modified

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## 2009 cont

- Construction/demolition debris processing facility (1,000 tpd, Westbrook) licensed by DEP
- PL 2009 Chapter 348 (An Act to Require State-owned Solid Waste Disposal Facilities to Demonstrate a Public Benefit)
- Initial task force recommendations made concerning the future operation of the Maine Energy waste-to-energy facility in Biddeford

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## 2009 con't

- Casella/SPO submitted application for determination of public benefit for the expansion of the state-owned Juniper Ridge Landfill; DEP issues draft denial; application withdrawn
- Pine Tree Landfill (Hampden) ceased waste acceptance (12/31/09)

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## 2010

- Updated Waste Generation and Capacity Report submitted by SPO (3/2010)

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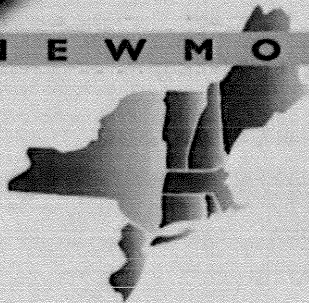
# Solid Waste Disposal in the NEWMOA States

Jennifer Griffith

Northeast Waste  
Management Officials'  
Association

May 13, 2010

NEWMOA



## What is NEWMOA?

- Nonpartisan, Non-profit Interstate Association (of the)
- Solid Waste, Hazardous Waste, Waste Site Cleanup, and Pollution Prevention Programs (in)
- CT, ME, MA, NH, NJ, NY, RI, VT
- Formally recognized by EPA in 1986
- See FY 2009 Annual Report for more information on NEWMOA

# Today's Presentation

- **NEWMOA's Solid Waste Activities**
- **Data on Interstate Flow of Solid Waste**
  - MSW Disposal
  - C&D Debris Management
- **Emphasis on Maine**

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## NEWMOA Solid Waste Activities - Overview

- **Information-Sharing**
- **MSW Interstate Flow**
  - Disposal only
  - Annually 1999 through 2006 and 2008
  - Reports on 1999, 2000 and 2002 data
- **C&D Debris Management**
  - Processing and disposal
  - Reports on 2001, 2002 and 2006 data

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# Information Sharing

- **Workgroup - Solid Waste Program Managers (e.g. ME DEP)**
- **Bi-monthly calls on priority topics**
- **Other at state request**
  - State Solid Waste Program Funding and Staffing - May 2007
  - Fees States Charge Solid Waste Facilities - November 2008
  - Tip Fees at Disposal Facilities - March 2010

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# MSW Disposal Tip Fees

- **E-mail survey**
  - CT: \$57-\$70 per ton at WTEs, \$68 at 1 LF
  - ME: \$70 & \$100 at 2 WTEs, \$86 at 1 LF
  - MA: \$74 average (from municipalities)
  - NH: \$77 average
  - NY: \$27 - \$72, \$50 average (from facilities)
  - RI: \$32 residential/\$46 commercial
  - VT: \$90 MSW and \$80 C&D
- **Note: Approximate prices**
  - Varies depending on contract terms

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## **Municipal Solid Waste (MSW) Disposal in the NEWMOA states (2008 data)**

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## **NEWMOA MSW Interstate Flow Analysis**

- **Workgroup of States - est. 2000**
- **States share data through NEWMOA**
- **Data from import state often not the same as export state**
  - Direct haul issues
  - Disposal facility data considered more reliable by Workgroup
  - Variations in disposal facility

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# **NEWMOA MSW Interstate Flow Analysis**

- **Performed annually on 1999 - 2006 data**
- **Biennial 2008 data on**
- **Reports published on 1999, 2000 and 2002 data**
- **[www.newmoa.org/solidwaste/pubs.cfm](http://www.newmoa.org/solidwaste/pubs.cfm)**

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# **MSW Disposal Observations**

- **MSW management is regional**
- **Most MSW management activities are private sector**
- **Facilities in all NEWMOA states import and/or export to facilities in other NEWMOA states for disposal**
- **CT, MA, NJ and NY also utilize facilities outside NEWMOA-region**
- **ME sends some MSW to Canada**

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## MSW Disposal - Export Observations

- All NEWMOA states export MSW to other states
- How much of the MSW disposed was exported in 2008?
  - CT = 10.3%
  - ME = 7.1%
  - MA = 17.5%
  - NH = 9.1%
  - NJ = 45.4%
  - NY = 42.4%
  - RI = 8.4%
  - VT = 23.9%

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## MSW Disposal - Import Observations

- All NEWMOA states (except RI & VT) import MSW from other states
- How much of MSW disposed in a state was imports in 2008?
  - CT = 3.3%
  - ME = 23.8%
  - MA = 3.4%
  - NH = 38.3%
  - NJ = 15.7%
  - NY = 11.1%
  - RI = 0%
  - VT = 0%

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# Rhode Island

- **Central Landfill owned/operated by RI Resource Recovery Corporation (RIRRC)**
  - quasi-government
  - prohibited by legislature from accepting out-of-state wastes
  - New management - effect shown in data

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# Vermont

- **Relatively high tipping fees**
- **Solid waste disposed taxed \$6/ton**
  - Applies to waste sent from Vermont for out-of-state disposal
- **Origin community must have same services as Vermont requires**
  - Source separation, recycling, HHW
- **All facilities must be named in solid waste district's plan**

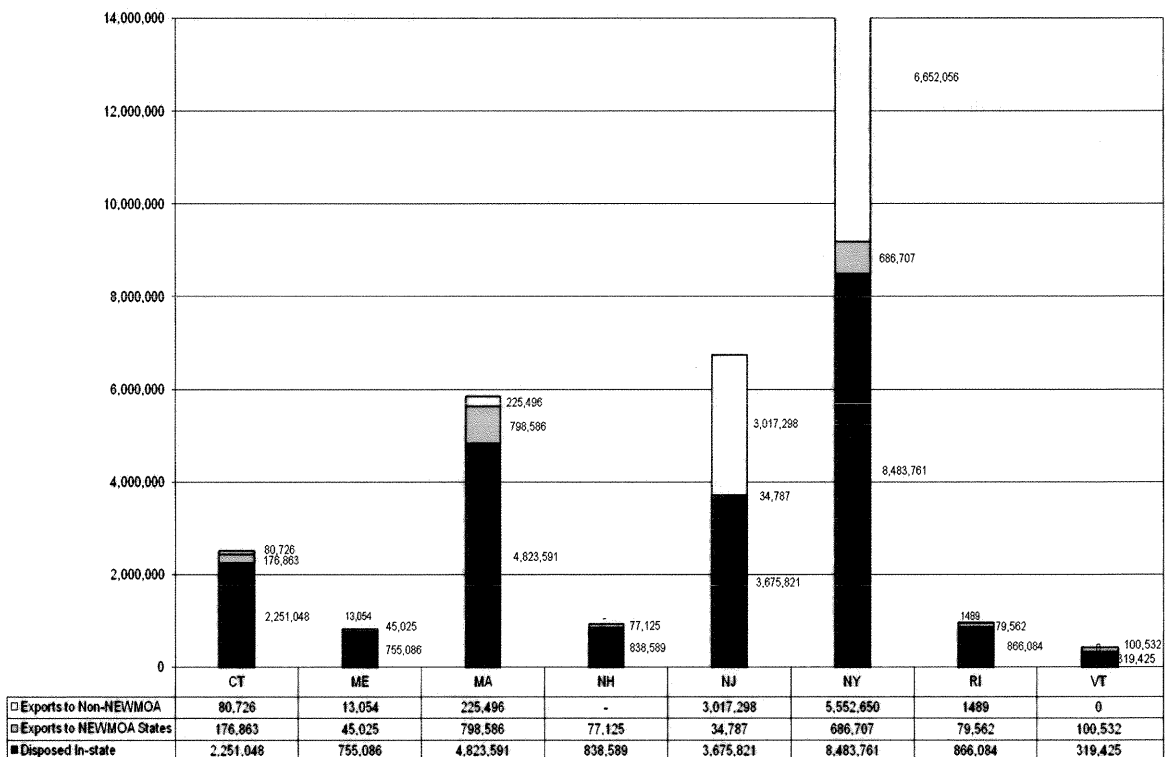
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# Connecticut

- 20 year contracts with resource recovery facilities - Connecticut Resource Recovery Authority (CRRRA)
- CRRRA facilities at capacity with member cities/towns
- Most contracts expiring soon - changes?
- Tax on disposal

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Figure 2: MSW Generated by State and Disposed (2008, in tons)



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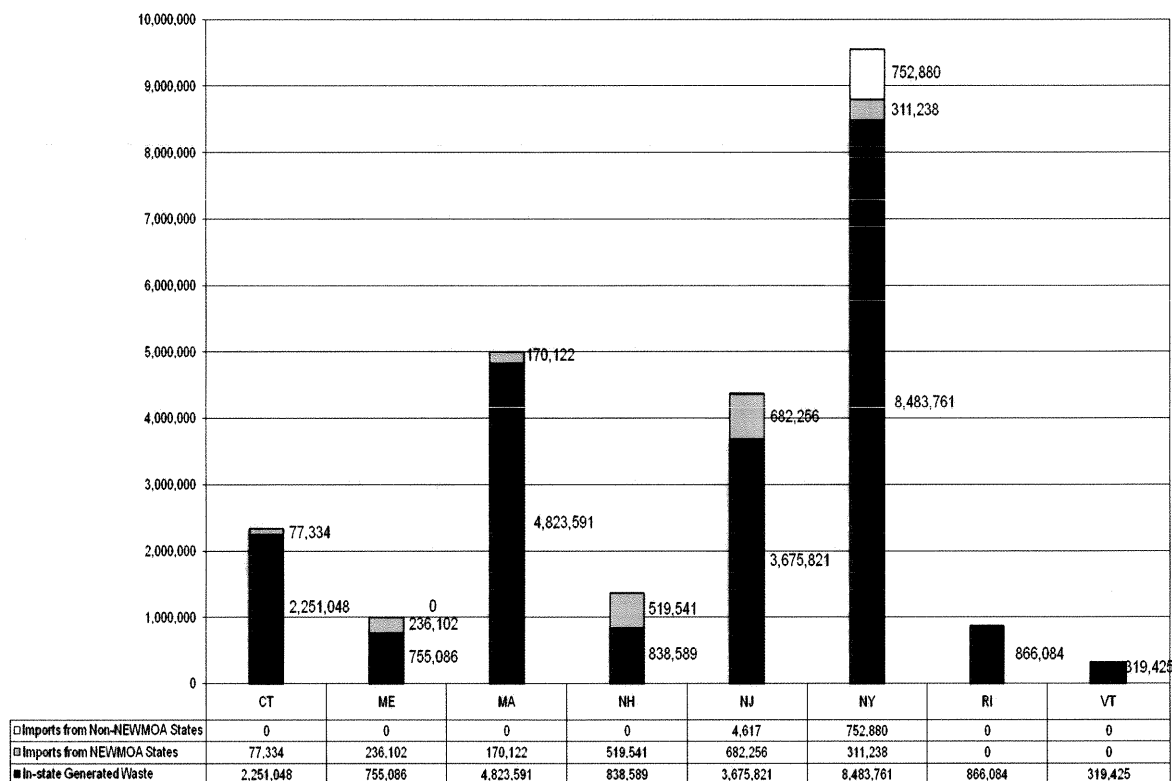


# MSW Disposal Observations

- The majority of MSW generated in a state that is disposed, is managed in-state
- For example, in 2008:
  - Facilities in MA disposed over 4.8 million tons of MA-generated MSW (82.5%)
  - Facilities in ME disposed over 755,000 tons of ME-generated MSW (92.9%)

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Figure 3: Total Quantity of MSW Disposed of In-State (2008, in tons)



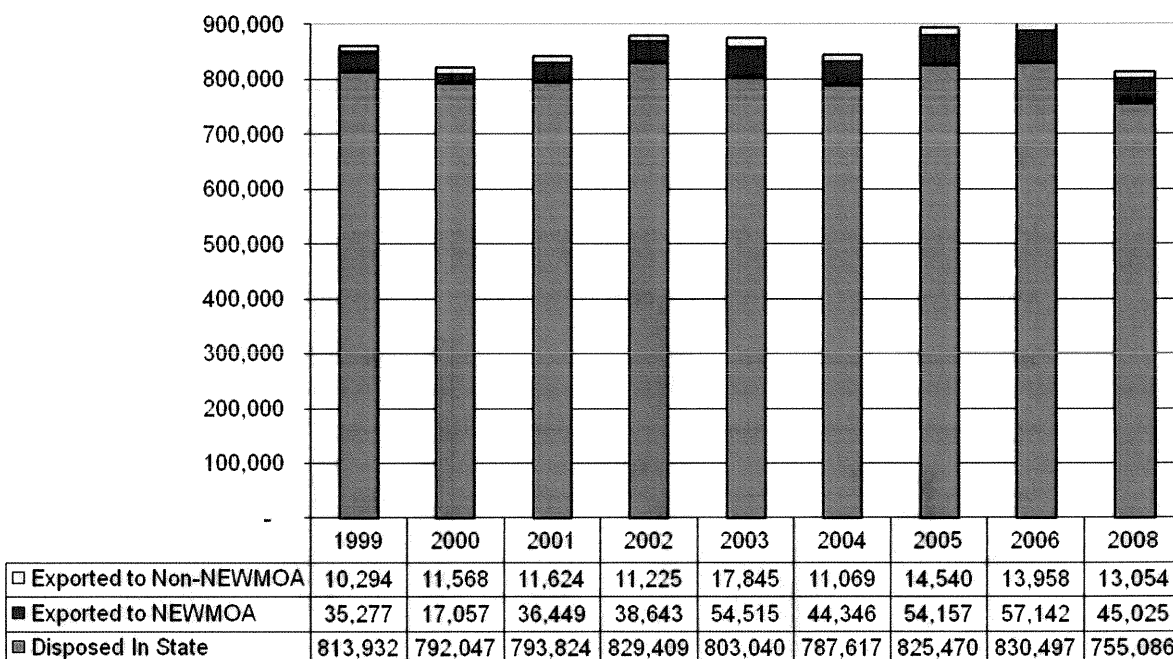
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# MSW Disposal Observations

- **States that exported significantly also received MSW in 2008:**
  - MA - over 170,000 tons
  - NJ - over 680,000 tons
  - NY - over 1.06 million tons
- **States that imported significantly also exported MSW in 2008:**
  - ME - over 45,000 tons
  - NH - over 77,000 tons

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**MSW Generated in Maine and Disposed**



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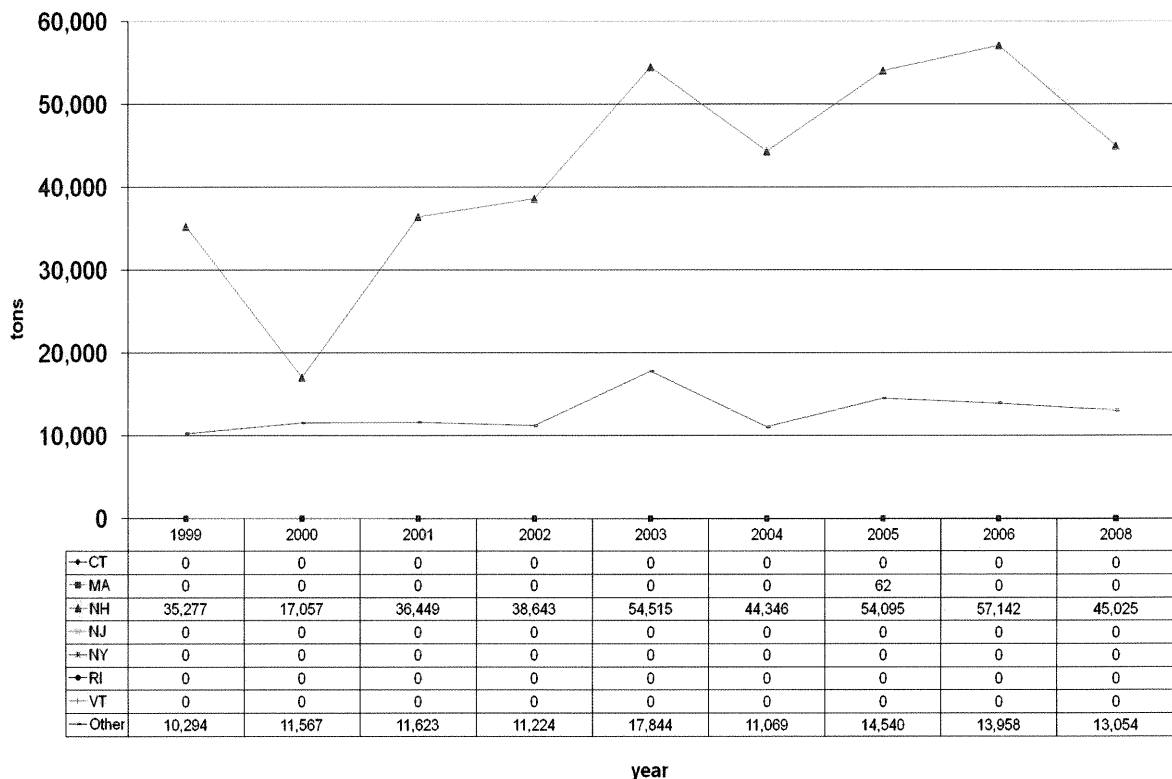


# MSW Disposal Observations

- Overall disposal destinations do not vary significantly over time
  - Disposed in-state
  - Exported to NEWMOA states
  - Exported to non-NEWMOA states
- Imports to and exports from individual states can vary significantly year-to-year

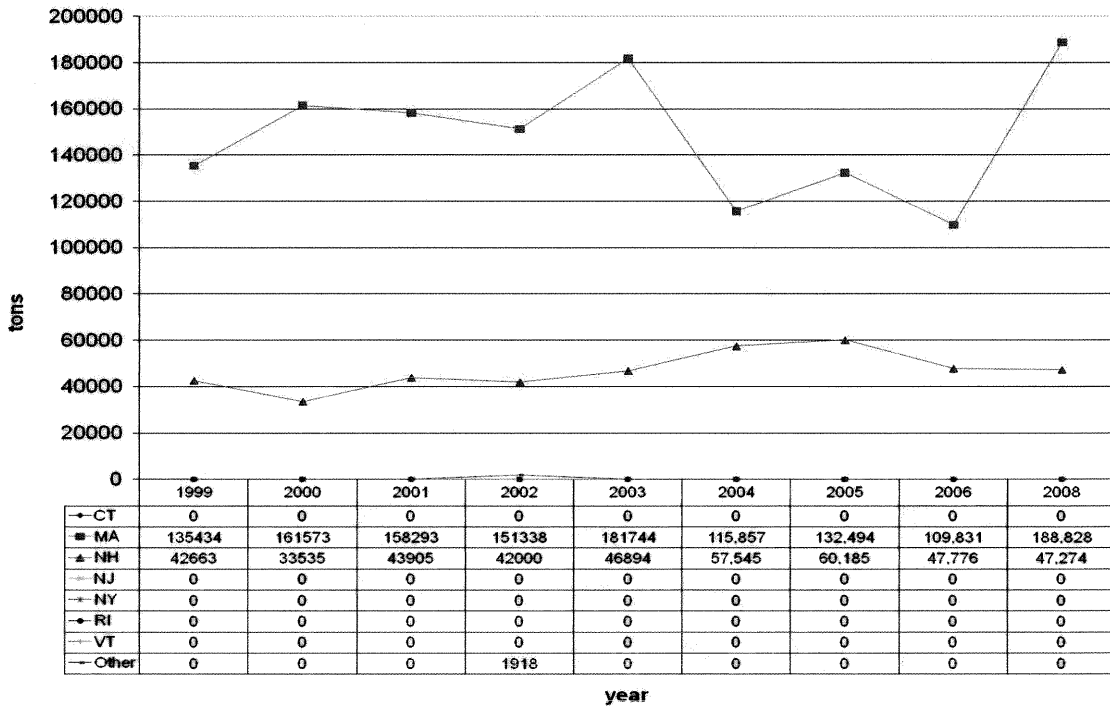
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MSW Exports from Maine: 1999 through 2008



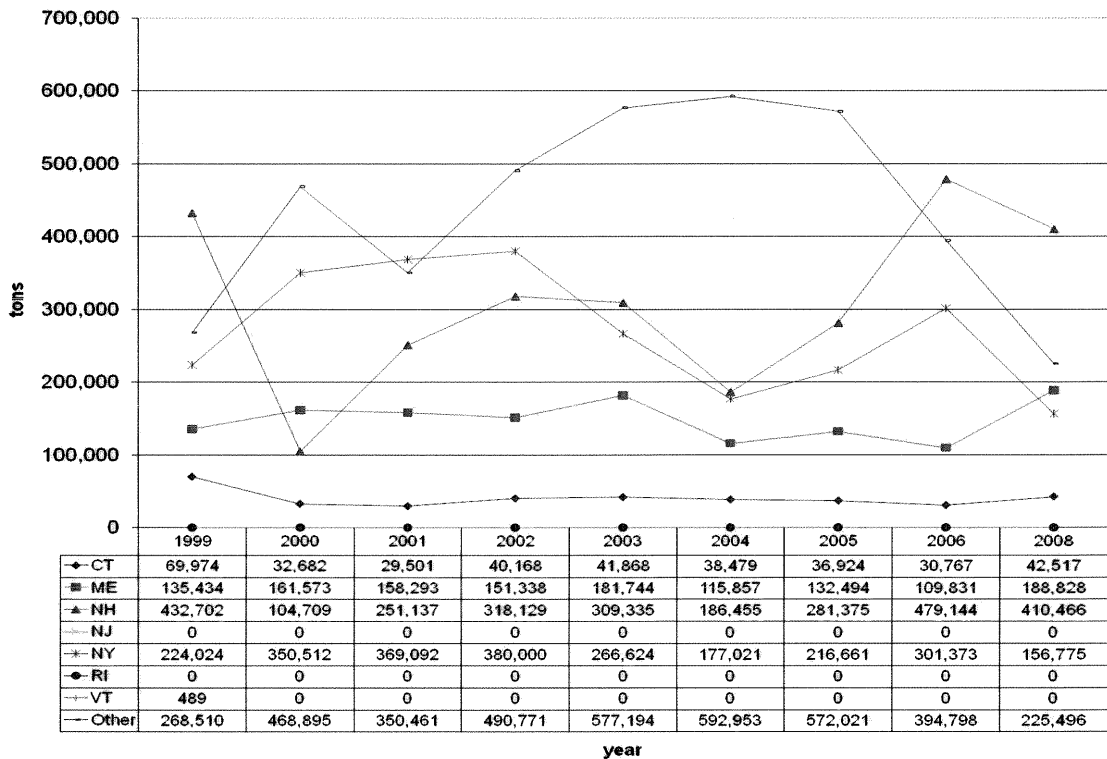
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**MSW Imports to Maine: 1999 through 2008  
(tons)**



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**MSW Exports from Massachusetts: 1999 through 2008  
(tons)**



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# Factors Influencing Disposal Location

- Tipping fee & transportation costs combined
- Regulatory burden of disposal facility
- Long-term contracts
- Relationship between hauler company and disposal facility company

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## Per-Capita Disposal 2006 and 2008

	2006 Per Capita MSW Disposed (tons/year)	2008 Per Capita MSW Disposed (tons/year)	2008 Per Capita MSW Disposed of At Facilities in the State (tons/year)
Connecticut	0.81	0.72	0.67
Maine	0.68	0.62	0.75
Massachusetts	0.95	0.90	0.77
New Hampshire	0.73	0.70	1.03
New Jersey	0.82	0.77	0.50
New York	0.80	0.76	0.49
Rhode Island	1.11	0.90	0.82
Vermont	0.67	0.68	0.51

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## Per-capita Disposal Observations

- **Per-capita disposal (includes exports) vs. per-capita disposed at facilities (includes imports)**
- **Quantity disposed in a state per-capita (2008):**
  - Highest in NH (1.03)
  - Lowest in NJ, NY & VT (0.49/0.50)
  - MA higher than ME

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## Per-capita Disposal Observations

- **Per-capita disposal decreased in all states (except VT) between 2006 and 2008**
  - For MA, overall quantity disposed decreased more than 290,000 tons
- **Significant variation in per-capita disposal between states (2008)**
  - 0.62 in ME
  - 0.90 in MA and RI

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## **Construction and Demolition Waste Management in the NEWMOA states (2006 data)**

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## **Construction and Demolition Debris**

- **Workgroup of States - est. 2001**
- **States share data through NEWMOA**
- **Data from import state often not the same as export state**
  - Direct haul issues
  - Disposal facility considered more reliable by Workgroup
- **Also includes analysis of processing and recycling data**

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# **NEWMOA C&D Debris Management Analysis**

- Performed on 2001, 2002 & 2006 data
- Reports published on 2001 & 2002 data and 2006 data
- 2006 data analysis funded by small grant from U.S. EPA Region 1
- [www.newmoa.org/solidwaste/pubs.cfm](http://www.newmoa.org/solidwaste/pubs.cfm)

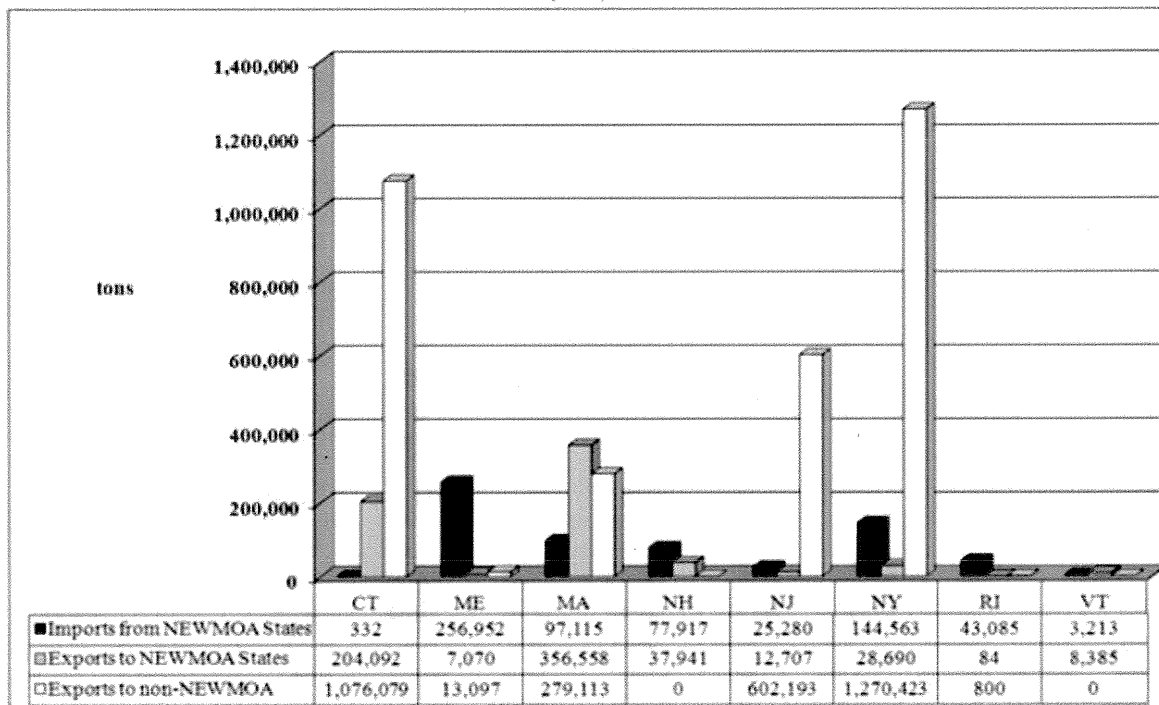
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# **NEWMOA C&D Debris Management Analysis**

- Focus on C&D debris from building projects
- Road/bridge project debris excluded
  - Mostly asphalt, brick and/or concrete
  - Heavy - dwarfs other tonnages
  - Mostly processed on-site or at facilities that specialize
  - Mostly reused (e.g. road base, RAP)

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**Figure 1:  
2006 C&D Waste Imports and Exports for Disposal  
(tons)**



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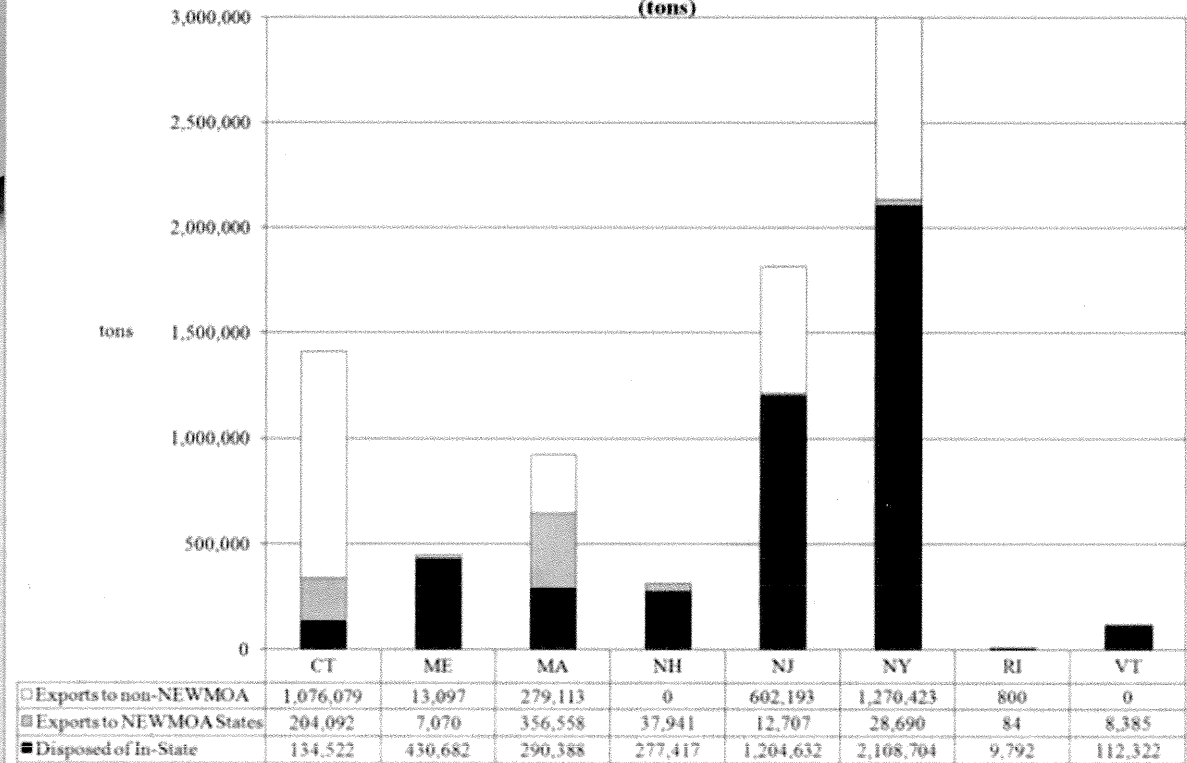
## C&D Debris Management Observations

- C&D debris management is regional
- Most C&D debris management activities are private sector
- Facilities in all NEWMOA states import and/or export to facilities in other NEWMOA states
- CT, MA, NJ and NY also utilize facilities outside NEWMOA-region

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**Figure 2:**  
**2006 C&D Waste Generated by State and Disposed**  
**(tons)**



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## C&D Debris Disposal Observations

- Includes quantities sent for disposal after processing
- Does not include use as alternative daily cover (ADC) at landfills
- Most states dispose majority in-state (2006)
  - facilities in CT and MA sent more out-of-state than to disposal in-state

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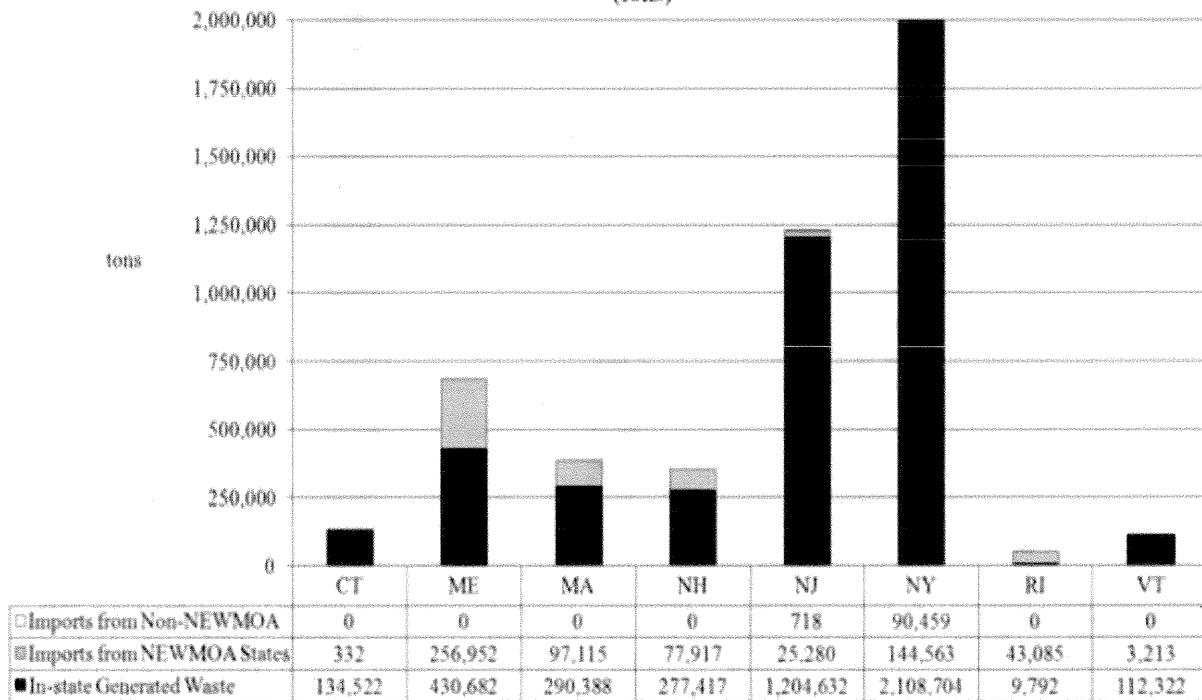


**Table ME1  
2006 C&D Waste Generated in ME & Disposed**

State	Disposal (tons)
Maine	430,682
New Hampshire	7,070
Non-NEWMOA States/Provinces	13,097
<b>TOTAL</b>	<b>450,849</b>

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**Figure 3:  
Total Quantity of C&D Waste Disposed of In-State  
(tons)**

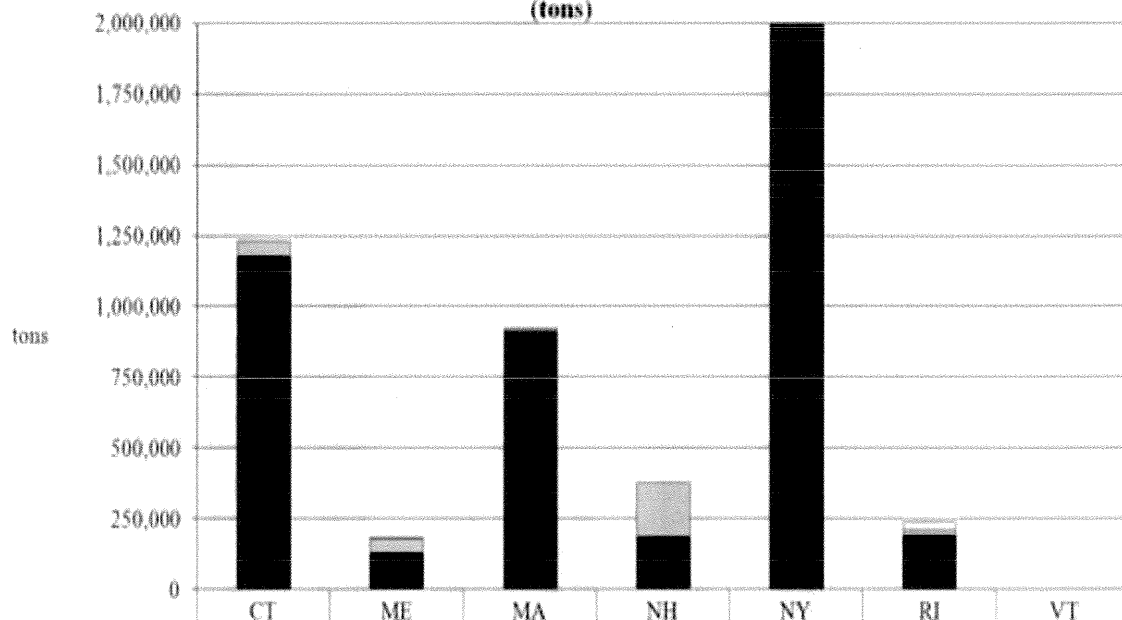


38

<b>Table ME2</b> <b>2006 Origin of C&amp;D Waste Disposed in ME</b>	
State	C&D Waste (tons)
Connecticut	17
Maine	430,682
Massachusetts	220,600
New Hampshire	36,076
New York	197
Rhode Island	62
<b>TOTA</b>	<b>687,634</b>

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**Figure 4:**  
**2006 C&D Waste Inputs at Processors**  
**(tons)**



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# C&D Processing - Observation fro 2006 data

- **Recovery for reuse outside the landfill relatively consistent across states - Either:**
  - Significant direct disposal - smaller portion to processors with high recovery (ME and NH)
    - (particular about what they accept)
  - Little direct disposal - most waste goes first to processors, but overall recovery low (CT, MA)

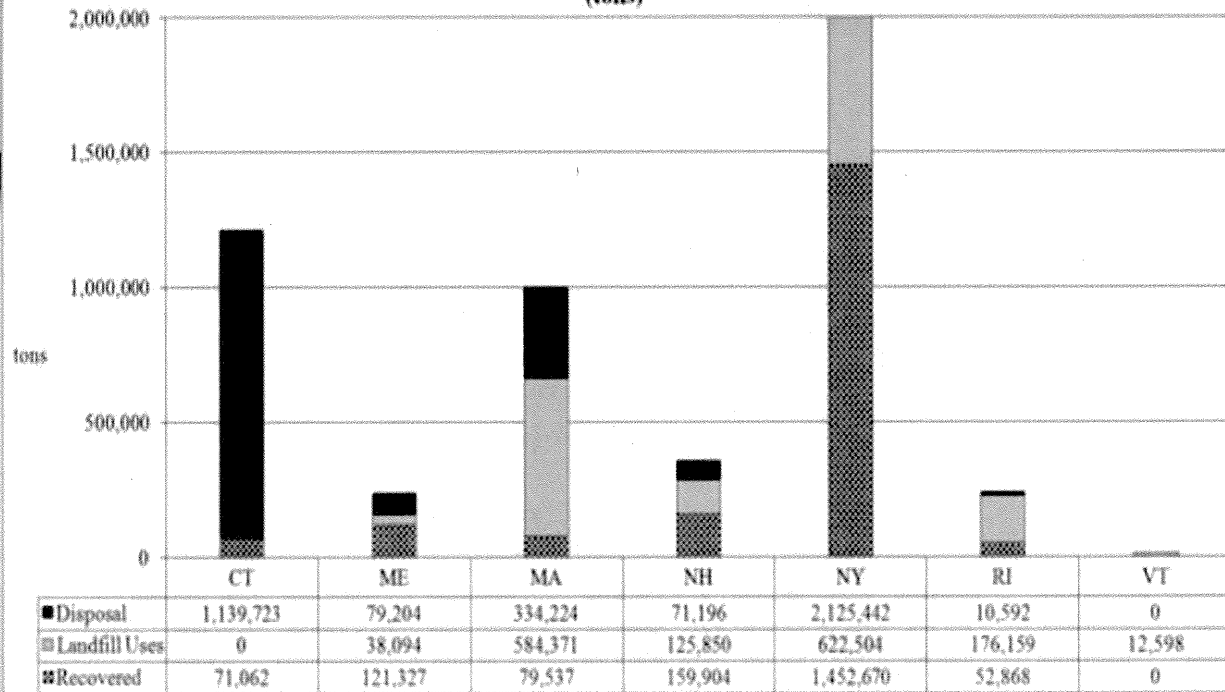
41

**Table ME3**  
**2006 C&D Waste Inputs at ME Processors**

State	Origin of C&D waste (tons)
Maine	130,429
Massachusetts	44,203
New Hampshire	9,288
New York	33
<b>TOTAL</b>	<b>183,953</b>

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**Figure 5:  
2006 C&D Waste Processor Outputs  
(tons)**



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## C&D Debris Processing Observations

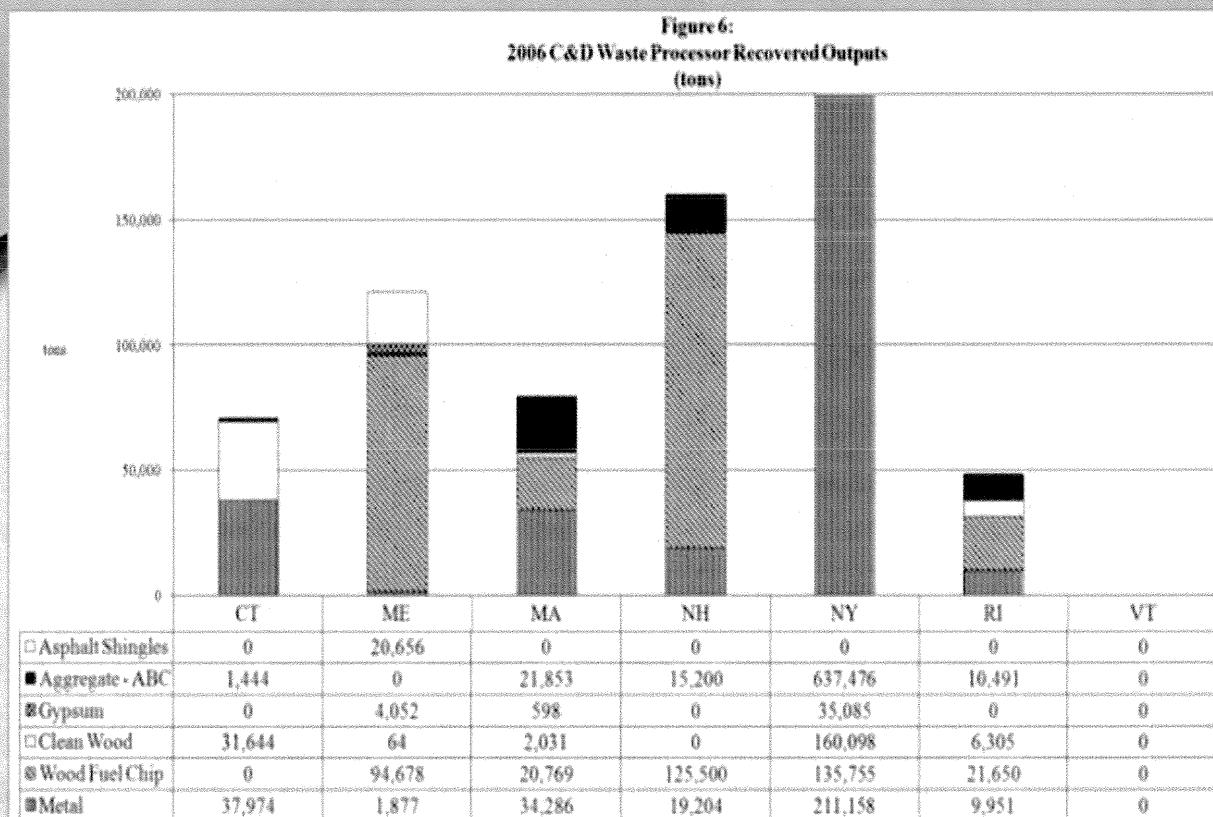
- Processing facilities in ME and NH recovered greater quantities than other states in 2006
- Processors in ME recovered more for use outside landfill than they sent to landfill in 2006
- Data for NY is skewed - includes some road/bridge project debris

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Table ME4 2006 C&D Waste Processor Outputs & Destinations			
Stat	Recovered (tons)	Landfill Use (tons)	Disposed (tons)
Maine	121,327	38,094	59,037
New Hampshire	0	0	7,070
Non- NEWMOA	0	0	13,097
<b>TOTAL</b>	<b>121,327</b>	<b>38,094</b>	<b>79,204</b>

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<b>Table ME5</b> <b>2006 C&amp;D Waste Processors - Materials Recovered &amp; Destination</b> <b>(tons)</b>					
<b>State</b>	<b>Gypsum</b>	<b>Clean Wood</b>	<b>Fuel Chip</b>	<b>Metal</b>	<b>Asphalt Shingles</b>
Maine	4,052	64	94,678	1,877	20,656

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## **C&D Waste Report Conclusions** **- 2006 data**

- **Availability & quality of data varies greatly among states**
- **Approximately 10 % recovered for use outside landfill**
- **Most C&D waste in a landfill**
  - Direct disposal or used as ADC
- **Metals recovery significant**
- **Opportunity to increase recovery of other materials!**

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# Gypsum Wallboard Recycling

- Workgroup of states - est. 2008
- Stakeholder visits
- Policy options
  - Disposal ban
  - Require recycling at state projects
  - Develop common terminology and facility reporting requirements
  - Require waste management planning
  - Extended Producer Responsibility

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## For More Information:

NEWMOA  
129 Portland Street  
Boston, MA 02114  
[www.newmoa.org](http://www.newmoa.org)

Jennifer Griffith, Project Manager  
(617) 367-8558, ext. 303  
[jgriffith@newmoa.org](mailto:jgriffith@newmoa.org)

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